

CHAPTER 8: Activities at or Near the Land/Water Interface

Purpose and Applicability of Regulations

Food processors often conduct activities at or near locations where the land meets the water, often referred to as the land/water interface. Construction activities of structures, such as fresh water intakes, storm water outlets, and utility, road, or pedestrian crossings of a stream or wetland, are regulated. A permit is required for any occupation, construction, filling, or grade change within the 100-year floodplain of a river, stream, or drain. Permits are also required for other activities in wetlands and chemical treatments to control nuisance aquatic plant and/or algae growth in inland lakes, in water treatment ponds used for cooling or settling, or ponds equipped with fountains for aesthetic purposes. Review of this chapter may be beneficial even if there are no site improvements currently under consideration.



Agencies and Their Laws and Rules

The Michigan Department of Environmental Quality (DEQ), Land and Water Management Division (LWMD), administers several parts of the Natural Resources and Environmental Protection Act, Public Act 451 of 1994, as amended (Act 451), that regulate activities that are on, within, or involve any of the following:

- A wetland.
- A stream, river, ditch, drain, channel, or canal.
- A 100-year floodplain or floodway.
- A pond, an inland lake greater than 5 acres, or a Great Lake.
- Earth moving or construction of any canal, ditch, lagoon, pond, or lake within 500 feet of an existing waterbody.

In coastal counties, the LWMD also regulates activities in designated high-risk erosion areas, critical dune areas, and environmental areas.

The U.S. Army Corps of Engineers (USACE) also regulates some of the above activities at the federal level. To simplify the permit process for Michigan's residents, the LWMD has developed a "**MDEQ/USACE - Joint Permit Application**" form (EQP 2731) with the USACE that can be used for regulated activities at or near the land/water interface.

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The DEQ's Water Bureau administers Part 33, (Aquatic Nuisance Control) of Act 451, which regulates herbicide or pesticide application to lakes or ponds. This includes water treatment ponds for cooling or settling or ponds equipped with fountains for aesthetic purposes.

The Water Bureau's Soil Erosion and Sedimentation Control Program administers Part 91 (Soil Erosion and Sedimentation Control) of Act 451. This statute requires a permit for all earth changes disturbing one or more acres, or for any size earth change within 500 feet of a lake or stream. This statute authorizes county and local enforcing agencies to issue permits. The authorized permitting agencies for each county are available at www.michigan.gov/deqland (select "Soil Erosion and Sedimentation Control"). See also Section 3.2.3.b Permit-by-Rule under the National Pollutant Discharge Elimination System for information on regulatory requirements for the management of storm water during construction.

8.1 Introduction

The "MDEQ/USACE - Joint Permit Application" (EQP 2731) is used for activities regulated by the parts of Act 451 summarized in Section 8.2 through 8.10. Complete only the portions of the application that are applicable to your proposed activity.

The LWMD, Permit Consolidation Unit (PCU) and DEQ district offices can also answer permit questions. Permit applications and the required application fee should be mailed to the Permit Consolidation Unit, LWMD, DEQ, P.O. Box 30204, Lansing, MI 48909-7704. The PCU conducts a preliminary review of permit applications to make sure they are administratively complete and publishes public notices when required. The LWMD district offices review permit applications, conduct site inspections, and issue permits for regulated activities covered on the MDEQ/USACE - Joint Permit Application.

Technical assistance and permit review negotiations conducted by field staff minimize negative impacts to natural resources from new development. District staff may make a site inspection, collect comments, or ask for modifications to the proposal. It can take ninety days or more to receive an issued or denied permit. District offices also respond to complaints and conduct compliance activities.

The Permit Consolidation Unit has produced a training manual that will help you submit a complete MDEQ/USACE - Joint Permit Application. To view and print an order form go to www.michigan.gov/jointpermit.

US Army Corps of Engineers (USACE)		Clear Form		Michigan Department of Environmental Quality (MDEQ)	
<div style="border: 1px solid black; padding: 2px;"> <div style="display: flex; justify-content: space-between;"> <div> <div>AGENCY USE</div> <div>Previous USACE Permit or File Number</div> <div>USACE File Number</div> </div> <div> <div>DATE RECEIVED</div> <div></div> </div> </div> </div>		<div style="border: 1px solid black; padding: 2px;"> <div style="display: flex; justify-content: space-between;"> <div> <div>AGENCY USE</div> <div>Land and Water Management Division, MDEQ File Number</div> <div>Marina Operating Permit Number</div> <div>Fee received \$</div> </div> <div> <div>DATE RECEIVED</div> <div></div> </div> </div> </div>			
<p>• Complete all items in Sections 1 through 8 and those items in Sections 10 through 21 that apply to the project. Clear drawings and cross sections must be provided.</p> <p>1 PROJECT LOCATION INFORMATION</p> <p>• Refer to your property's legal description for the Township, Range, and Section information, and your property tax bill for your Property Tax Identification Number(s).</p> <p>Address: _____ Township Name(s) _____ Township(s) _____ Range(s) _____ Section(s) _____</p> <p>City/Village _____ County(ies) _____ Property Tax Identification Number(s) _____</p> <p>Name of Waterbody _____ Project Name or Job Number _____ Subdivision/Plot _____ Lot Number _____ Private Claim _____</p> <p>Project type (check all that apply): <input type="checkbox"/> private <input type="checkbox"/> public/government <input type="checkbox"/> industrial <input type="checkbox"/> commercial <input type="checkbox"/> river restoration <input type="checkbox"/> multi-family <input type="checkbox"/> building addition <input type="checkbox"/> new building or structure <input type="checkbox"/> building renovation or restoration <input type="checkbox"/> other (explain) _____</p> <p>The proposed project is on, within, or involves (check all that apply): <input type="checkbox"/> a legally established County Drain (date established: _____)</p> <p><input type="checkbox"/> a stream <input type="checkbox"/> a pond (less than 5 acres) <input type="checkbox"/> a Great Lake or Section 10 Waters <input type="checkbox"/> a natural river <input type="checkbox"/> a new marina <input type="checkbox"/> a river <input type="checkbox"/> a channel/canal <input type="checkbox"/> a designated high risk erosion area <input type="checkbox"/> a dam <input type="checkbox"/> a structure removal <input type="checkbox"/> a ditch or drain <input type="checkbox"/> an inland lake (5 acres or more) <input type="checkbox"/> a designated critical dune area <input type="checkbox"/> a wetland <input type="checkbox"/> a utility crossing <input type="checkbox"/> a roadway area <input type="checkbox"/> a 100-year floodplain <input type="checkbox"/> a designated environmental area <input type="checkbox"/> 300 feet of an existing waterbody</p> <p>2 DESCRIBE PROPOSED PROJECT AND ASSOCIATED ACTIVITIES, AND THE CONSTRUCTION SEQUENCE AND METHODS</p> <p>• Attach separate sheets, as needed, including necessary drawings, sketches, photographs, aerials, or plans.</p> <p>3 APPLICANT, AGENT/CONTRACTOR, AND PROPERTY OWNER INFORMATION</p> <p>• The applicant can be either the property owner or the person or company that proposes to undertake the activity.</p> <p>• If the applicant is a corporation, both the corporation and its owner must provide a written document authorizing the agent/contractor to act on their behalf.</p> <p>Applicant (individual or corporate name) _____ Agent/Contractor (firm name and contact person) _____</p> <p>Mailing Address _____ Address _____</p> <p>City _____ State _____ Zip Code _____ City _____ State _____ Zip Code _____</p> <p>Daytime Phone Number with Area Code _____ Cell Phone Number _____ Daytime Phone Number with Area Code _____ Cell Phone Number _____</p> <p>Fax _____ E-mail _____ Fax _____ E-mail _____</p> <p>Is the applicant the sole owner of all property on which this project is to be constructed and all property involved or impacted by this project? <input type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>If No, provide a letter signed by the property owner authorizing the agent/contractor to act on his or her behalf or a copy of easements or right-of-ways. If multiple owners, attach all property owners' names, mailing addresses, and telephone numbers. Disclose any DCEC conservation easements or other easements, deed restrictions, leases, or any other encumbrance upon the property in the project area. A copy of the land restriction must be provided.</p> <p>Property Owner's Name (if different from applicant) _____ Mailing Address _____</p> <p>Daytime Phone Number with Area Code _____ Cell Phone Number _____ City _____ State _____ Zip Code _____</p> <p>4 PROPOSED PROJECT PURPOSE, INTENDED USE, AND ALTERNATIVES CONSIDERED (Attach additional sheets if necessary)</p> <p>• The purpose must include any new development or expansion of an existing land use.</p> <p>• Include a description of alternatives considered to avoid or minimize resource impacts. Include factors such as, but not limited to, alternative construction technologies, alternative project layout and design, alternative locations, local land use regulations and infrastructure, and pertinent environmental and resource issues.</p> <p>• For utility crossings, include both alternative routes and alternative construction methods.</p>					
Joint Permit Application PDF Fill-in Page 1 of 7 EQP 2731 Revised 12/2005					

8.2 Part 31 of Act 451: Water Resources Protection, Floodplain Regulatory Authority

A Part 31 permit is required for any occupation, construction, filling, or grade change within the 100-year floodplain of a river, stream, drain, or lake. Bridges and culverts are considered an occupation of the floodplain, as are activities that involve storage of materials in the floodplain. A 100-year flood has a one (1) percent chance of occurring or being exceeded in any given year. These activities are regulated by a permit system with the purpose of ensuring that the channels and floodways are kept clear and uninhabited and that structures placed outside the floodway are properly protected from flood damage. The floodway includes the stream channel and that portion of the floodplain that is required to convey the flow of floodwater. Structures that are placed outside of the floodway portion of the floodplain must be properly protected from flood damage. This can be accomplished by elevating structures above the 100-year floodplain elevation or by designing the structures to be water tight without human intervention.

Flood Insurance Requirements

Many cities and townships within Michigan participate in the National Flood Insurance Program (NFIP). Those communities usually have a Flood Insurance Rate Map. If your site is located in the floodplain area (frequently designated as an “A Zone”), the requirements are that any new or substantially improved structure must have its first floor, including the basement, elevated above the 100-year floodplain elevation, or flood-proofed to the elevation of the floodplain. Flood-proofing must be done in a manner that the building is water tight and able to withstand hydrostatic pressures up to the 100-year floodplain elevation.

8.3 Part 301 of Act 451: Inland Lakes and Streams

The intent of the Inland Lakes and Streams Protection Program is to protect the integrity of the land/water interface, the correlative rights of other riparian owners, and the public trust in the inland waters of the state. Road and pedestrian crossings, as well as utility crossings that disturb land below the ordinary high water mark, are examples of common projects that require a Part 301 permit. A stormwater outfall, with or without streambank or streambed protection (riprap), stream relocations, and enclosures are also examples of projects requiring a permit.



A Part 301 permit is required for the following activities below the ordinary high-water mark of all inland lakes and streams:

- Dredge or fill bottomlands.
- Construct, enlarge, extend, remove, or place a structure on bottomland.
- Erect, maintain, or operate a marina.
- Create, enlarge, or diminish an inland lake or stream.
- Structurally interfere with the natural flow of an inland lake or stream.
- Construct, dredge, commence, extend, or enlarge an artificial canal, ditch, lagoon, pond, lake,

or similar waterway through which the purpose is ultimate connection with an existing inland lake or stream, or where any part of the artificial waterway is located within 500 feet of the ordinary high-water mark of an existing inland lake or stream.

- Connect any natural or artificially constructed waterway, canal, channel, ditch, lagoon, pond, lake, or wetland with an existing inland lake or stream for navigation or any other purpose.

8.4 Part 303 of Act 451: Wetlands Protection

Part 303 defines a wetland as *“land characterized by the presence of water at a frequency and duration sufficient to support, and that under normal circumstances does support, wetland vegetation or aquatic life, and is commonly referred to as a bog, swamp, or marsh.”* The definition applies to public and private lands regardless of zoning or ownership. The following activities are prohibited in wetlands unless a Part 303 permit has been obtained from the DEQ:

- Deposit or permit the placing of fill material in a wetland.
- Dredge, remove, or permit the removal of soil or minerals from a wetland.
- Construct, operate, or maintain any use or development in a wetland.
- Drain surface water from a wetland.



Regulated wetlands are defined in Part 303 and associated administrative rules.

Wetlands Identifications

The DEQ, LWMD, Wetland Identification Program (WIP), offers two levels of service to help businesses and the public identify wetland and upland areas on their properties. For a Level 2 Identification, a technical specialist conducts an on-site review to determine the presence or absence of wetlands. A technical specialist can also provide a Level 3 Identification, which is an on-site review to confirm specific wetland boundaries established by a wetland consultant. Individuals interested in WIP services must submit a WIP application to the LWMD, Wetlands, Lakes and Streams Unit. The WIP application and a fee calculator can be downloaded at www.michigan.gov/deqwetlands or you may call (517) 241-8485.

8.5 Part 323 of Act 451: Shorelands Protection and Management

This program provides for the designation and proper management of environmental areas, high-risk erosion areas, and flood risk areas along the Great Lakes shoreline. These areas include coastal wetlands and the adjacent uplands that provide habitat and nursery for fish and wildlife.

A Part 323 permit is required for any of the following activities in a Designated Environmental Area:

- Dredging, filling, grading, or other alterations of the soil.
- Alteration of natural drainage, but not including the reasonable care and maintenance of

established drainage.

- Alteration of vegetation utilized for the preservation and maintenance of fish or wildlife, including identified colonial bird nesting areas.
- Placement of permanent structures.

The following counties have Designated Environmental Areas:

Alcona	Arenac	Charlevoix	Delta	Huron	Monroe
Alger	Baraga	Cheboygan	Emmet	Mackinac	Tuscola
Alpena	Bay	Chippewa	Houghton	Marquette	Wayne

A Part 323 permit is required for the construction, installation, or moving of a permanent structure on a parcel of land where any portion is a designated high-risk erosion area. Examples include homes, porches, septic systems, additions, substantial improvements of existing structures, and out buildings. The current counties with high-risk erosion areas include:

Alcona	Baraga	Delta	Iosco	Marquette	Ottawa
Alger	Bay	Emmet	Keweenaw	Mason	Presque Isle
Allegan	Benzie	Gogebic	Leelanau	Menominee	St. Clair
Alpena	Berrien	Grand Traverse	Luce	Muskegon	Sanilac
Antrim	Cheboygan	Houghton	Mackinac	Oceana	Schoolcraft
Arenac	Chippewa	Huron	Manistee	Ontonagon	Van Buren

The flood risk area program requires new construction in the 100- year floodplain of the Great Lakes to be elevated to prevent property damage. Forty-one coastal communities have designated flood risk areas mapped and regulations in effect. These communities also all participate in the National Flood Insurance Program, the federal program providing the sole source of flood insurance. These designated communities have approved zoning ordinances and regulate construction in flood risk shorelands locally. Permits are issued by the local unit of government. The LWMD oversees performance and provides technical assistance.

8.6 Part 353 of Act 451: Sand Dunes Protection and Management

The designated critical dune areas along the Great Lakes shoreline are areas where the most unique and fragile sand dunes are found. This program minimizes the impact of development on these critical dune areas. A permit is required for all proposed new uses in designated critical dune areas mapped in the “**Atlas of Critical Dune Areas**” prepared by



the DEQ. The following counties have designated critical dune areas:

Alger	Berrien	Emmet	Luce	Mason	Ottawa
Allegan	Charlevoix	Keweenaw	Mackinac	Muskegon	Schoolcraft
Antrim	Chippewa	Leelanau	Manistee	Oceana	Van Buren
Benzie					

Islands that have designated critical dune areas include Beaver Island, North Fox Island, South Fox Island, High Island, North Manitou Island, and South Manitou Island.

8.7 Section 404 of the Federal Clean Water Act of 1977 and Section 10 of the Rivers and Harbors Act of 1899

Section 404 of the Clean Water Act (CWA) prohibits the discharge of dredged or fill material into waters of the United States, including inland lakes and streams, the Great Lakes, and wetlands, without a permit. Michigan was the first of only two states currently authorized to administer the permit program for the federal government at the state level. In most areas of the state, issuance of a permit by DEQ's LWMD in accordance with the CWA requirements also authorizes a project under Section 404, and no separate federal permit is required. However, since Section 10 does not provide for similar transfer to states, the U.S. Army Corps of Engineers (USACE) retains Section 404 jurisdiction within those waters that are navigable waters of the U.S. and their adjacent wetlands. Therefore, a separate permit is required from the USACE in Section 10 waters. Submittal of a single, completed MDEQ/USACE - Joint Permit Application to the LWMD ensures that Section 404 permit applications will be processed by all appropriate agencies.

The discharge of any fill materials must comply with state water quality standards consistent with Sections 301, 307, and 401 of the Clean Water Act.

8.8 Fees

The fees for permit applications vary significantly between the various parts of Act 451 and will vary within a Part depending on whether you are proposing a minor or major project. Minor projects are outlined in the respective rules and on the LWMD's web site. An up-to-date fee schedule, "**State Fees for Land/Water Interface Activities**" (**EQP 2704**), is available via the DEQ's web site or by calling the PCU at (517) 373-9244. Fees for the soil erosion and sedimentation control permits are established by the county or local agency issuing the permit. If you need further information or assistance, please contact the PCU at (517) 373-9244.

8.9 Other Land and Water Interface Laws

The Land and Water Management Division, DEQ, also administers several other statutes that require permits for certain construction activities. The following is a list of other statutes, and an address to the web site with additional information about these laws.

Statute	Web Address
Part 315, Dam Safety	www.michigan.gov/deqdamsafety
Part 325, Great Lakes Submerged Lands	www.michigan.gov/deqgreatlakes
Act 288 of 1967, Lands Division Act	www.michigan.gov/deqwatermanagement

WHERE TO GO FOR HELP

SUBJECT: Permit application for chemical treatment to control nuisance aquatic plant or algae growth

CONTACT: DEQ, Water Bureau, Inland Lakes Unit
(517) 241-7734
www.michigan.gov/deqwater

SUBJECT: Permit application and instructions

CONTACT: DEQ, Land and Water Management Division, Permit Consolidation Unit (PCU)
(517) 373-9244
www.michigan.gov/jointpermit

PUBLICATIONS:

1. MDEQ/USACE - Joint Permit Application (EQP 2731)
2. MDEQ/USACE - Joint Permit Application Training Manual
3. State Fees for Land/Water Interface Activities (EQP 2704)

SUBJECT: Regulated activities at or near the land/water interface

CONTACT: DEQ, Land and Water Management Division
(517) 373-9244
www.michigan.gov/deqlwmd

PUBLICATIONS:

1. Atlas of Critical Dunes	(517) 373-1746
2. Building a Pond in Michigan	(800) 662-9278
3. Floodplain Management for Local Officials (Guidebook)	(517) 335-3181
4. General Permit Categories for Minor Activities in Wetlands	(517) 373-1746
5. Living with Michigan Wetlands; a Landowner's Guide (Guidebook)	(517) 373-1746
6. Michigan Coastal Resources	(517) 373-1746
7. Preserving Michigan's Wetland, Options for Local Governments (Guidebook)	(517) 373-1746
8. Shoreline Protection for Inland Lakes	(800) 662-9278
9. Shoreline Processes of the Great Lakes	(517) 373-1746
10. Wetlands - A Guide for Property Owners and Home Builders	(517) 373-1746
11. Wetland Protection	(800) 662-9278
12. Wetland Assessment Program Fact Sheet	(517) 373-1746
13. Wetland Mitigation Administrative Rules	(517) 373-1746
14. Wetland Mitigation Banking Fact Sheet	(517) 373-1746